

Abstract

This invention discloses a type of improved graphite granules and the method for their fabrication. Each improved graphite granule includes an unimproved graphite granule whose electrochemical properties need to be improved, and a membrane of amorphous carbon enveloping said unimproved graphite granule forming the membrane. The thickness of said amorphous carbon membrane is between 0.05 μ m and 1 μ m. To fabricate said improved graphite granules, said unimproved graphite granules are immersed in a polymer surface modifying solution, stirred, separated, sifted, and then solidified and carbonized. Said improved graphite granules, when used as the negative electrode of a lithium ion rechargeable battery produces a battery with excellent high current characteristics, high reversible specific capacity, long cycle life, and can satisfy the performance demands on rechargeable batteries. The technology for the fabrication of this improved graphite granules is simple. Its cost of production is low. Therefore, it is easy to implement this technology for mass production.